

AMENDMENT

In the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

1-29. (Canceled)

30. (Currently amended) A system for delivering a substance into tissue comprising:
a patch including

a basal layer having a first side and a second side, and
a plurality of micro-perforators projecting from the first side of the basal layer and
formed from a solid matrix material that can be dissolved in the tissue to form channels for
delivering a substance into the tissue by diffusion, wherein the matrix material comprises a polymer
or a carbohydrate derivative; and

a reservoir, including a solvent effective to dissolve the matrix material upon contact with
the solvent over a time interval of between a few tens of seconds and a few hours after the micro-
perforators have been inserted into a patient's body, wherein the reservoir can be attached to the
second side of the basal layer.

31. (Previously presented) The system of claim 30 wherein the matrix material comprises
the substance.

32. (Previously presented) The system of claim 30 wherein the reservoir further includes the
substance.

33. (Previously presented) The system of claim 32 wherein the matrix material comprises a
second substance.

34. (Previously presented) The system of claim 30 wherein the substance is a drug.
35. (Previously presented) The system of claim 30 wherein the matrix material comprises a polymer.
36. (Previously presented) The system of claim 30 wherein the matrix material comprises a carbohydrate derivative.
37. (Previously presented) The system of claim 30 wherein the matrix material is water-soluble.
38. (Previously presented) The system of claim 30 wherein the reservoir is integrally attached to the second side of the basal layer.
39. (Currently amended) A method for delivering a substance into tissue comprising:
forming a plurality of channels into the tissue by
inserting affixing a patch including a basal layer having a first side and a second side, and a plurality of micro-perforators projecting from the first side of the basal layer and formed of a solid matrix material into the tissue, wherein the matrix material comprises a polymer or a carbohydrate derivative, and
dissolving the solid matrix material to form the plurality of channels, wherein the matrix material dissolves over a time interval of between a few tens of seconds and a few hours after the micro-perforators have been inserted into a patient's body, wherein dissolving the matrix material comprises attaching to the patch a reservoir of a solvent effective to dissolve the matrix material upon contact with the solvent, and delivering the solvent from the reservoir to the micro-perforators;
and
delivering the substance through the plurality of channels by diffusion.

40-42. (Cancelled)

43. (Previously presented) The method of claim 39 wherein dissolving the matrix material is effective to deliver a second substance into the tissue.

44. (Currently amended) The method of claim 39 wherein the ~~micro-perforators are attached to a basal layer and the~~ method further comprises removing the basal layer from the tissue after the micro-perforators have dissolved.

45. (Previously presented) The method of claim 39 that further comprises activating a perforation activation mechanism that is effective to insert the plurality of micro-perforators to a predetermined distance into the tissue.